

Organized by
Electronics & ICT Academy



MNIT Jaipur <http://www.mnit.ac.in/eict>

Computation Techniques in Optics and Photonics

20 August- 25 August, 2018

Venue: Prabha Bhawan,
Dept. Of ECE, MNIT Jaipur

Faculty Development Programme
Sponsored by



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Ministry of Communications
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Preamble (Electronics & ICT Academy)

Government of India had announced a National Policy on Skill Development, which has set a target of skilling 500 million people by 2022 in the domain of Electronics & IT. Under the plan scheme of "Digital India Manpower Development". DeitY has set up seven Electronics and ICT Academies as a unit in 03 IITs, 03 NITs and 01 IIIT with an objective of faculty/mentor development/up gradation in the areas related to Electronics & ICT leading ultimately to improved employability of graduates/diploma holders. MNIT Jaipur has set up such an academy for providing specialized training to faculty and industry persons in the states/UTs of Rajasthan, Gujarat, Daman & Diu, Dadra Nagar Haveli.

(A) Issues-

1. IT Hardware and Electronics Manufacturing industry-availability of properly trained, skilled and qualified manpower
2. Number of quality PhDs generated in IT / Computer Science is very low
3. In E & ICT domain- there is a very high degree of obsolescence of existing technologies and faster emergence of newer technologies

(B) Approach-

1. A focused faculty training / updation programme for IT, Electronics and related sectors
2. Spreading up and continuous updation regarding Emerging Technology
3. Training and consultancy services for Industry
4. Design, Develop and Deliver

One-week training programme is being organized for faculty of engineering and technological institutions. It is also open to faculties, persons from industry and doctoral students of Indian organizations. The objective is to provide an exposure to the participants to the various computational methods (like FEM, FDTD, TMM etc.) in the field of engineering **with experts from CSIR, IIT Delhi, CEERI Pilani** and other academic CFTI institutions such as NITs/IITs including host institution. The technical program will include mostly hands-on lab sessions, tool demonstrations, and discussion/presentation sessions with few lectures.

Programme topics:

- A. Slow Light in Photonic Crystal for Faster Photonic Devices, Recent trends in Photonics, Experimental study for Simulation of Solar cell
- B. Nitride devices their fabrication and applications, Characterization (XPS, AFM, SEM etc) of MOCVD grown and fabricated III-Nitride devices,
- C. Graphene/GaN Nanowire based Photo-detectors and NanoLEDs, Modeling and Simulations of Microwave components and devices, Optimization Techniques
- D. Si v/s III-IV group Integrated Photonics, MEMS in Photonics, Modeling and Simulations of Metamaterials

Eminent Invited Experts: -

1. Prof. R. K. Sinha, Director CSIR-CSIO
2. Dr. Rajendra Kumar, IIT Delhi
3. Dr. Manish Mathew, CEERI Pilani
4. Dr. Ayan Kumar Bandyopadhyay, CEERI Pilani

Academia Programme coordinators

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Registration:

Registration is open to faculty, industry persons, doctoral and postgraduate students of Engineering. Participants will be admitted on a *first-come first-served* basis. Selected participants will be notified on or before 14th August, 2018. Register on line at <http://www.mnit.ac.in/eict>

Fee: (A) The one-time registration fee of Rs. 500/- would be applicable for each participant attending first time, irrespective of affiliation. This fee is not applicable for those participants, who have attended Academy training programme earlier.

(B). (i) The participants from academia and research scholars are required to pay a further fee of Rs. 2000/- (faculty/research-scholars). Rest expenditure is sponsored by DeitY through Electronics & ICT Academy at MNIT Jaipur.

(ii) However, the participants from industries, UG/PG students would pay a further fee of Rs. 5000/-.

(iii) Relaxation/rebate of 50% of course fee in (i) and (ii) is applicable for SC/ST candidates.

(C). **The fee covers the participation in the programme, registration material including tutorial notes, boarding (breakfast/lunch) on all the days of the workshop.** The travel and other expenses would have to be borne by the participants or their parent organizations.

(D). **Lodging and boarding of first 20 registered participants (outside Jaipur) would be provided free of costs on sharing basis at MNIT hostels.** However, the boarding for other outside participants is available at additional payment basis.

(E) The organizers should receive the registration amount through online payment/NEFT/IMPS/DD.

Account Name- 'Electronics & ICT Academy MNIT Jaipur'	Account Number- 676801700483
Bank address- ICICI Bank, MNIT Campus Branch, Jaipur	IFSC Code- ICIC0006768

(F) Please pre-intimate your desire to participate through e-mail, before registration form reaches us.

Further query: Please visit us at (a): <http://www.mnit.ac.in/eict>,

(b) Email us: [academy\[AT\]mnit.ac.in](mailto:academy[AT]mnit.ac.in)